

AG

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 11064741 A

(43) Date of publication of application: 05.03.99

(51) Int Cl

G02B 23/18
H04N 5/225

(21) Application number: 09221823

(22) Date of filing: 18.08.97

(71) Applicant: ASAHI OPTICAL CO LTD

(72) Inventor: TSUKAMOTO SHINJI
ENOMOTO SHIGEO
HIRUNUMA KEN

(54) BINOCULARS EQUIPPED WITH DIGITAL CAMERA

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain small-sized light-weight binoculars equipped with a digital camera having a simplified structure by providing a mirror driving means for making a movable mirror stand by at a non-photographing position at the time of not photographing and making the mirror advance into the photographing position only at the time of photographing.

SOLUTION: The mirror driving motor 15 is fixed between the optical paths PL and PR of the binoculars 10, and a turning support shaft 13 is installed as the rotary shaft of the motor 15. Thus, the mirror 12 is moved to the photographing position/non- photographing position in accordance with the forward/backward rotation of the motor 15. And the motor 15 is started up by a system control part so as to move the mirror 12 from the non-photographing position to the photographing position, then, just after the end of moving the mirror 12, a CD image pickup element 14 is driven so as to start picking up an image. After the end of picking up the image, the motor 15 is started up again so as to retreat the mirror 12 from the photographing position to the non-photographing position. Thus, it is unnecessary to install an ND filter in the optical path on the side

where the movable mirror 12 is not installed of an observation optical system, then, the binoculars can be made small in size and light in weight.

COPYRIGHT: (C)1999,JPO

